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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,303	10/31/2003	Hashem Mohammad Ebrahimi	1565.062US1	1384

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EXAMINER	
CHAI, LONGBIT	
ART UNIT	**PAPER NUMBER**
2131	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/698,303	EBRAHIMI ET AL.	
	Examiner	Art Unit	
	Longbit Chai	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 October 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/31/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. No claim for priority has been made in this application.

The effective filing date for the subject matter defined in the pending claims in this application is 10/31/2003.

Claim Objections

2. Claims 7 and 12 are objected to because of the following informalities: "the receiving the" should be "receiving the". Appropriate corrections are required.

3. Claims 19 and 26 are objected to because of the following informalities: "memory or storage accessible to the client" should be "a memory or storage accessible to the client". Appropriate corrections are required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 21 is rejected under 35 U.S.C. 101 because the claimed subject matter is merely a collection of data structures (e.g., "an original request data structure" or "instruction data" or "modified request data" as recited in the claim) and therefore the claim falls under the category of functional descriptive material (i.e. merely an abstract idea as a data structure) and as such is directed to non-

statutory subject matter as not being tangible. Besides, independent claim 21 is claiming a "content-preserving data structure", which is not limited to one of the four statutory classes on an invention and as such the claim is directed to non-statutory subject matter. Any other claims not addressed are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 5 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 is indefinite because (a) the claim language "transparently transmits the modified request from the client back to the method" is considered to be unclear in its meaning and therefore it is not clear which stage of the method the Applicant is exactly referred to, and (b) there is insufficient antecedent basis for the claim limitation "the client" as recited in the claim that transparently transmits the modified request since it is not clear whether "the client" is referred to an authenticated client or "the non-authenticated client".

Claims 3 and 7 are indefinite because there is insufficient antecedent basis for the claim limitation "the client" since it is not clear, for example, whether "the client" is referred to "an authenticated client" or "the non-authenticated client".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3, 5 – 9, 11, 14 – 16, 18 – 21, 24, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deen et al. (U.S. Patent 2003/0167317), in view of Burrows et al. (U.S. Patent 2005/0055434).

As per claim 1, Deen teaches a method for preserving content, comprising:

receiving a request having content originating from a non-authenticated client (Deen : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21and Para [0035] the last 2nd sentence: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the client can just email the URL (Para [0003] Line 19 – 20) and the request may include the authentication information that requires authentication by the server – i.e. a HTTP / WebDAV request from an unauthorized client) ;

modifying the request and associating the content with the modified request (Deen : Para [0073] – [0074]: the content type of the client's HTTP / WevDAV "PUT" request uses the new content type via MIME maps if the MIME map specifies a different content type than the client's PUT request of the resource).

However, Deen does not disclose expressly redirecting the non-authenticated client to an authentication service and including the modified request; and receiving the modified request from an authenticated client and reacquiring the content using the modified request.

Burrows teaches redirecting the non-authenticated client to an authentication service and including the modified request (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5 and Figure 5 Element 502, 508 & 510: the client receives the RE-DIRECT message from the application server – i.e. the primary server – and forwards to the peer server (i.e. the secondary server) that performs an authentication operation on the client); and

receiving the modified request from an authenticated client (Burrows: Para [0062] Last Sentence: the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client) and

reacquiring the content using the modified request (Burrows: Para [0064] Line 9 – 13: the required data is obtained from the intermediate DB or from the redirected response).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Burrows within the system of Deen because (a) Deen teaches a certain types of HTTP request that

can also handle content-bearing WebDAV request by using a URL (Deen : Para [0002] and [0003]) and (b) Burrows teaches processing a client HTTP request by providing not only a multiple servers infrastructure including a proxy server (Burrows: Para [0033] Line 1 – 8) but also a secondary server to implement a particular communication protocol such as authentication protocol that the primary server does not have but other server components may have to achieve interaction with users through web browsers and similar types of client applications (Burrows: Para [0006] – [0007], Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5).

As per claim 8, Deen teaches a method for preserving content, comprising:

issuing a content-bearing request to a service(Deen : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21and Para [0035] the last 2nd sentence: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the client can just email the URL (Para [0003] Line 19 – 20) and the request may include the authentication information that requires authentication by the server – i.e. a HTTP / WebDAV request from an unauthorized client) ;

receiving a modified request for authentication (Deen : Para [0073] – [0074] 21 and Para [0035] the last 2nd sentence: the content type of the client's HTTP / WevDAV "PUT" request uses the new content type via MIME maps if the MIME map specifies a different content type than the client's PUT request of the resource). However, Deen does not disclose expressly a redirection for

authentication; authenticating with an authentication service; and issuing the modified request to the service.

Burrows teaches a redirection for authentication (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5 and Figure 5 Element 502, 508 & 510: the client receives the RE-DIRECT message from the application server – i.e. the primary server – and forwards to the peer server (i.e. the secondary server) that performs an authentication operation on the client); and authenticating with an authentication service (Burrows: Para [0061] Line 3 – 5 : the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client) and issuing the modified request to the service (Burrows: Para [0062] Last Sentence: the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client for the desired service).

See same rationale of combination applied herein as above in rejecting the claim 1.

As per claim 15, Deen teaches a content-preserving system, comprising:

a desired service (Deen: Para [0003] Line 1 – 10); and

a server, wherein a client issues a content-bearing request to the desired serviceand the server detects that the client is not authenticated to the desired service (Dean : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21and Para [0035] the last 2nd sentence: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing

the entire file, the client can just email the URL (Para [0003] Line 19 – 20) and the request may include the authentication information that requires authentication by the server – i.e. a HTTP / WebDAV request from an unauthorized client).

However, Dean does not disclose expressly the server is a proxy server and wherein the proxy preserves content associated with the content bearing request, redirects the client to an authentication service, and directs the client to issue a modified request after being authenticated, the modified request used by the proxy to reacquire the content and submit the original content-bearing request to the desired service once the client is authenticated.

Burrows teaches the server is a proxy server (Burrows: Para [0033] Line 1 – 8: a proxy server to receive a client's request) and wherein the proxy preserves content associated with the content bearing request, redirects the client to an authentication service (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5 and Figure 5 Element 502, 508 & 510: the client receives the RE-DIRECT message from the application server – i.e. the primary server – and forwards to the peer server (i.e. the secondary server) that performs an authentication operation on the client); and

directs the client to issue a modified request after being authenticated (Burrows: Para [0062] Last Sentence: the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client) and

the modified request used by the proxy to reacquire the content and submit the original content-bearing request to the desired service once the client is

authenticated (Burrows: Para [0064] Line 9 – 13: the required data is obtained from the intermediate DB or from the redirected response for the desired service after the client is authenticated).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Burrows within the system of Deen because (a) Deen teaches a certain types of HTTP request that can also handle content-bearing WebDAV request by using a URL (Deen : Para [0002] and [0003]) and (b) Burrows teaches processing a client HTTP request by providing not only a multiple servers infrastructure including a proxy server (Burrows: Para [0033] Line 1 – 8) but also a secondary server to implement a particular communication protocol such as authentication protocol that the primary server does not have but other server components may have to achieve interaction with users through web browsers and similar types of client applications (Burrows: Para [0006] – [0007], Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5).

As per claim 21, Deen teaches a content-preserving data structure residing in computer-readable medium, the content-preserving data structure comprising:

an original request data structure associated with an original content-bearing request for a desired service issued from a client (Deen : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21and Para [0035] the last 2nd sentence: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the

client can just email the URL (Para [0003] Line 19 – 20) and the request may include the authentication information that requires authentication by the server – i.e. a HTTP / WebDAV request from an unauthorized client).

However, Deen does not disclose expressly instruction data for reacquire content associated with the original content bearing request; and modified request data that includes the original request along with the instruction data.

Burrows teaches instruction data for reacquire content associated with the original content bearing request and modified request data that includes the original request along with the instruction data (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5, Para [0062] Last Sentence and Figure 5 Element 502, 508 & 510: the instruction data is interpreted as the instruction of re-directing the modified request to the 2nd server and to resubmit the request data to the primary application server after the client is authenticated by the 2nd server – i.e. the client receives the RE-DIRECT message from the primary application server and forwards to the secondary peer server that performs an authentication operation on the client and the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client).

See same rationale of combination applied herein as above in rejecting the claim 1.

As per claim 3, 11, 18 and 26, Deen as modified teaches the modifying further includes directing the client to store the content in a temporary file and

identifying the temporary file within the modified request (Dean : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the client can just email the URL).

As per claim 5, 9 and 27, Deen as modified teaches the redirecting further includes installing a resubmit application on the client that transparently transmits the modified request from the client back to the method when the non-authenticated client is successfully authenticated (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5, Para [0062] Last Sentence and Figure 5 Element 502, 508 & 510: the redirecting instruction includes re-directing the modified request to the 2nd server and to resubmit the request data to the primary application server by a installed resubmit application – i.e. after the client is successfully authenticated by the 2nd server e. the client receives the RE-DIRECT message from the primary application server and forwards to the secondary peer server that performs an authentication operation on the client and the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client).

As per claim 6 and 16, Deen as modified teaches recreating the content based on directions provided in the modified request (Burrows: Para [0064] Line 9 – 13 and Para [0073] – [0074]: the required data is obtained from the intermediate DB or from the redirected response; where the content type of the client's HTTP /

WevDAV "PUT" request uses the new content type via MIME maps if the MIME map specifies a different content type than the client's PUT request of the resource).

As per claim 7, Deen as modified teaches the receiving the request further includes receiving the request as a Uniform Resource Locator (URL) request from a World Wide Web (WWW) browser on the client, the request received over the Intent using Hyper Text Transfer Protocol (HTTP) communications (Dean : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the client can just email the URL).

As per claim 14, Deen as modified teaches issuing the content-bearing request further includes issuing the content bearing request as a Hyper Text Transfer Protocol (HTTP) communication including at least one of a PUT operation and a POST operation (Dean : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21 and [0073] – [0074]: the content-bearing request can be issued as a URL type HTTP / WebDAV request from a browser on a client; instead of emailing the entire file, the client can just email the URL and the content type of the client's HTTP / WevDAV "PUT" request uses the new content type via MIME maps if the MIME map specifies a different content type than the client's PUT request of the resource).

As per claim 19, Deen as modified teaches instructions indicate that the content can be acquired from memory or storage accessible to the client (Dean : Para [0002] Line 4 – 6, Para [0003] Line 5 – 8 / Line 19 – 21: the content-bearing can indicate a URL that stores the content accessible to the client).

As per claim 20, Deen as modified teaches the proxy detects that the client is not authenticated from the desired service (Dean : Para [0033] Line 1 – 8 and Para [0043] Line 11 – 17: proxy can alternatively participate the implementation of the authentication protocol and thus may detect that the client is not authenticated from the desired service).

As per claim 24, Deen as modified teaches the instruction data includes a resubmit application that processes on the client after the client is authenticated and is used by the client to automatically and transparently resubmit the modified request data once the client is authenticated (Burrows: Para [0060] Line 1 – 6, Para [059] Line 1 – 4 and Para [0061] Line 3 – 5, Para [0062] Last Sentence and Figure 5 Element 502, 508 & 510: the instruction data is interpreted as the instruction of re-directing the modified request to the 2nd server and to resubmit the request data to the primary application server after the client is successfully authenticated by the 2nd server – i.e. the client receives the RE-DIRECT message from the primary application server and forwards to the secondary peer server that performs an authentication operation on the client and

the response from the 2nd server (i.e. peer server) is further re-directed to the application server (i.e. the primary server) via the client).

7. Claims 2, 10, 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deen et al. (U.S. Patent 2003/0167317), in view of Burrows et al. (U.S. Patent 2005/0055434), and in view of Bodin et al. (U.S. Patent 6,604,106).

As per claim 2, 10, 17 and 25, Deen as modified does not disclose expressly the modifying further includes compressing the content within the modified request.

Bodin teaches the modifying further includes compressing the content within the modified request (Bodin : Column 5 Line 49 – 52 and Column 7 Line 30 – 33: the content type can be compressed to optimize the storage of web server content).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Bodin within the system of Deen as modified because (a) Deen teaches a certain types of HTTP request that can also handle content-bearing WebDAV request by using a URL such as HTTP PUT request and a new content type can be created if necessary (Deen : Para [0002] – [0003] and Para [0073]) and (b) Bodin teaches processing a client HTTP PUT request that can use / create a compressed content type so that the

storage of web server content can be optimized (Bodin : Column 5 Line 50 – 52 and Column 7 Line 30 – 33).

8. Claims 4, 13, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deen et al. (U.S. Patent 2003/0167317), in view of Burrows et al. (U.S. Patent 2005/0055434), and in view of Agarwalla et al. (U.S. Patent 6,985,936).

As per claim 4,13 and 22, Deen as modified does not disclose expressly the modifying further includes assigning a key to the modified request, storing the content, and indexing the content based on the key.

Agarwalla teaches the modifying further includes assigning a key to the modified request, storing the content, and indexing the content based on the key (Bodin : Column 10 Line 55 – 59 and Column 4 Line 5 – 15: in a content caching system, the content server translates (modifies) from an incoming URL of the target data to a file name; where the encrypted filename derived from the CMS (Content Management System) is used as a key to index into the mapping information to extract the associated URL equivalent as a file name value).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Agarwalla within the system of Deen as modified because (a) Deen teaches a certain types of HTTP request by using a URL to reference target data and a new content type of the data can be created if necessary (Deen : Para [0002] – [0003] and Para [0073])

and (b) Agarwalla teaches providing a security enhanced method handling HTTP request in a content caching system, where the substitute for the file name of the target data can be used without publicly exposing the information about the actual file structure used by a content server by translating (modifying) from an incoming URL of the target data to a file name; where the encrypted filename derived from the CMS (Content Management System) is further used as a key to index into the mapping information to extract the associated URL equivalent as a file name value (Agarwalla : Column 10 Line 59 – 62, Column 10 Line 55 – 59 and Column 4 Line 5 – 15).

As per claim 23, Deen as modified teaches the key is used for acquiring the content from a storage or memory location remote from the client (Agarwalla : Column 10 Line 55 – 59 and Column 4 Line 5 – 15: from a storage or memory location of the content server remote from the client).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deen et al. (U.S. Patent 2003/0167317), in view of Burrows et al. (U.S. Patent 2005/0055434), and in view of Rajan et al. (U.S. Patent 6,871,220).

As per claim 12, Deen as modified does not disclose expressly the receiving the instructions further include storing the content as a cookie.

Rajan teaches the receiving the instructions further include storing the content as a cookie (Rajan : Column 3 Line 19 – 20 and Column 15 Line 8 – 11:

the host / server computer receives the aggregated data content in a HTTP protocol message and preferably stored as cookie data).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Rajan within the system of Deen as modified because (a) Deen teaches a certain types of HTTP request by using a URL to reference target data and a new content type of the data can be created if necessary (Deen : Para [0002] – [0003] and Para [0073]) and (b) Rajan teaches providing a layer of security against unauthorized access by using cookie as another content type to associate personal information (PI) with each end user as specified in "HTTP State Management Mechanism" according to RFC-2109 so that an inherent support can be provided for segregating personal information (PI) associated with one end user from PI associated with all other end users (Rajan: Column 5 Line 17 – 31).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Longbit Chai

Longbit Chai, Ph.D.
Patent Examiner
Art Unit 2131
2/8/2007